determines whether sensing information stored by the state determination unit **104** exists. In this case, if the state determination unit **104** stores sensing information in its internal memory, the state determination unit **104** transmits information indicating the existence of the stored sensing information to the application processor **102** before entering a sleep mode.

[0101] If it is determined in step **703** that the sensing information stored by the state determination unit **104** exists, proceeding to step **705**, the application processor **102** receives the sensing information from the state determination unit **104**. In step **707**, the application processor **102** stores the sensing information received from the state determination unit **104** in the internal memory **106** of the portable terminal. That is, the application processor **102** may move the sensing information stored in the memory of the state determination unit **104** to the internal memory **106** of the portable terminal so as to periodically determine the life pattern of the user of the portable terminal. The state determination unit **104** and the application processor **102** may exchange the sensing information by using a predefined protocol (i.e., UART, I2C, memory interface, etc.).

[0102] In step **709**, the application processor **102** analyzes the life pattern of the user of the portable terminal by using the pre-stored sensing information. If the application processor **102** determines in step **703** that there is no sensing information stored by the state determination unit **104** (i.e., if the state determination unit **104** directly stores the sensing information in the internal memory **106** of the portable terminal instead of its own memory), the procedure proceeds to step **709**.

[0103] In step **711**, the application processor **102** performs an operation corresponding to the life pattern of the user. Then, the procedure of FIG. **7** ends.

[0104] The following operations can be performed by a portable terminal for determining a life pattern according to another exemplary embodiment of the present invention. First, if the portable terminal does not operate for a specific time duration and thus enters an idle state, the application processor **102** enters a sleep state and thus does not control respective modules. Additionally, when the portable terminal enters the idle state, the state determination unit **104** wakes up and obtains sensing information by using a sensor so as to examine a change in the sensing information. Of course, in a case where the state determination unit **104** allows the application processor **102** in the sleep state to wake up by using the sensing information, the state determination unit **104** enters the sleep state and. thereafter allows the application processor **102** to wake up.

[0105] In a case where a value of the sensing information changes significantly and thus it is determined as sensing information that can be used to determine the life pattern of the user of the portable terminal even though the state determination unit **104** does not allow the application processor **102** to wake up, the sensing information is stored so that the stored sensing information is used when the life pattern is determined.

[0106] For example, if the state determination unit **104** determines that a value of an acceleration sensor changes significantly and that a Global Positioning System (GPS) position changes persistently, the state determination unit **104** determines the life pattern indicating a movement of the user and periodically stores location/speed/time data. In this case, if the value of the acceleration sensor does no longed change, the state determination unit **104** determines the life pattern as the user does not move, and stops to store the data.

[0107] The application processor **102** analyzes the stored data so as to be able to determine a life pattern indicating a specific pattern frequently used by the user. After analyzing the life pattern, the application processor **102** can receive in advance traffic information of a path which is expected to be used by the user to go to work.

[0108] Additionally, when the application processor **102** analyzes data obtained by receiving a telephone call on a bus way home, and recognizes information indicating that the user is on way home, then the application processor **102** can perform tasks such as opening a garage door and operating a boiler by using home networking according to an expected time of arrival.

[0109] According to exemplary embodiments of the present invention, an apparatus and method for reducing power consumption generated in an idle state in order to solve a power consumption problem in a portable terminal are provided. When the portable terminal enters the idle state, a state determination unit using low power is allowed to determine a state of the portable terminal and thereafter an application processor is allowed to wake up, so as to solve the conventional power consumption problem that occurs when the portable terminal is in the idle state.

[0110] While the present invention has been shown and described with reference to certain exemplary embodiments thereof, it will be understood by those skilled in the art that various changes in form and details may be made therein without departing from the spirit and scope of the present invention as defined by the appended claims and their equivalents. Therefore, the scope of the invention is defined not by the detailed description of the invention but by the appended claims and their equivalents, and all differences within the scope will be construed as being included in the present invention.

1-22. (canceled)

23. An electronic device comprising:

a memory;

a first processor; and

a second processor configured to:

control to operate, while the first processor is in a sleep state, a sensor of the electronic device that obtains motion information of the electronic device,

control to write the motion information in the memory, and

control to send a notification to the first processor in the sleep state,

wherein the first processor is configured to read the motion information from the memory based on the notification.

24. The electronic device of claim **23**, wherein the motion information is for determining whether the electronic device is moving or stationary.

25. The electronic device of claim **23**, wherein the sensor comprises one of an acceleration sensor and a gyro sensor.

26. The electronic device of claim **23**, wherein the notification indicates existence of the motion information in the memory.

27. The electronic device of claim **23**, wherein the first processor is further configured to, after transitioning from the sleep state to a wake-up state, control to analyze the motion information to provide activity information for a user of the electronic device.